



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

August 2, 2012

Via E-mail

Mr. Richard P. Shea
Senior Vice President and
Chief Financial Officer
Momenta Pharmaceuticals, Inc.
675 West Kendall Street,
Cambridge, MA 02142

**Re: Momenta Pharmaceuticals, Inc.
 Form 10-K for the Fiscal Year Ended December 31, 2011
 Filed February 28, 2012
 Form 10-Q for the Quarterly Period Ended March 31, 2012
 Filed May 9, 2012
 File No. 000-50797**

Dear Mr. Shea:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information you provide in response to these comments, we may have additional comments and/or request that you amend your filings.

Form 10-Q for the Quarterly Period March 31, 2012
Note 8. Collaboration and License Agreements
Baxter Agreement, page 16

1. Please provide us an analysis with reference to the accounting literature to which you rely to support:
 - Treating the optional four additional follow-on biologic products as separate deliverables; and
 - Including the \$28 million of option payments as part of total arrangement consideration.

2. Please provide us proposed disclosure to be included in future periodic reports to clarify the estimated length of the research and development performance period for which you will recognize revenue for each deliverable.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in these filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to these filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Dana Hartz, Staff Accountant, at (202) 551-3648 or Don Abbott, Senior Staff Accountant, at (202) 551-3608 if you have questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3679

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant